

FILE 'USPAT' ENTERED AT 16:10:23 ON 10 JUN 1998

```
* * * * *
*           W E L C O M E   T O   T H E           *
*           U . S .   P A T E N T   T E X T   F I L E   *
* * * * *
```

=> s mobile telephone or mobile phone or cellular telephone or cell phone

```
58817 MOBILE
52969 TELEPHONE
2063 MOBILE TELEPHONE
      (MOBILE (W) TELEPHONE)
58817 MOBILE
11458 PHONE
640 MOBILE PHONE
      (MOBILE (W) PHONE)
45386 CELLULAR
52969 TELEPHONE
2662 CELLULAR TELEPHONE
      (CELLULAR (W) TELEPHONE)
206063 CELL
11458 PHONE
28 CELL PHONE
      (CELL (W) PHONE)
L1      4341 MOBILE TELEPHONE OR MOBILE PHONE OR CELLULAR TELEPHONE OR C
ELL
      PHONE
```

=> s l1 and power control

```
644499 POWER
1040981 CONTROL
11157 POWER CONTROL
      (POWER (W) CONTROL)
L2      404 L1 AND POWER CONTROL
```

=> s l2 and adjust? step size

```
828628 ADJUST?
721803 STEP
852042 SIZE
37 ADJUST? STEP SIZE
      (ADJUST? (W) STEP (W) SIZE)
L3      0 L2 AND ADJUST? STEP SIZE
```

=> s power control and adjust? step-size

```
644499 POWER
1040981 CONTROL
11157 POWER CONTROL
      (POWER (W) CONTROL)
828628 ADJUST?
721803 STEP
852042 SIZE
37 ADJUST? STEP-SIZE
      (ADJUST? (W) STEP (W) SIZE)
L4      1 POWER CONTROL AND ADJUST? STEP-SIZE
```

=> d 14

1. 5,697,073, Dec. 9, 1997, Apparatus and method for shaping and power controlling a signal in a transmitter; Christopher John Daniel, et al., 455/126, 116 [IMAGE AVAILABLE]

=> d 14 kwic

US PAT NO: 5,697,073 [IMAGE AVAILABLE]

L4: 1 of 1

ABSTRACT:

A transmitter architecture is disclosed which offers a new combination of signal shaping and **power control** which optimizes transmitter noise figure performance. The disclosed apparatus and method is implemented by separating the shaping element (303) from the **power control** elements (406, 412, 418) in frequency. Placing the shaping element (303) at a fixed intermediate frequency (IF) allows for the use of readily available, temperature stable shaping elements while distributing the **power control** elements (406, 412, 418) at radio frequency (RF) facilitates optimization of noise figure performance in the transmitter (200).

SUMMARY:

BSUM(4)

The . . . for spurious emissions, spectrum due to wideband noise, and spectrum due to switching transients require careful architecting of the transmitter's **power control**, on/off waveform shaping control, and noise figure line-up. Recently, the above requirements have been made even more severe with respect. . .

SUMMARY:

BSUM(7)

POWER CONTROL

SUMMARY:

BSUM(8)

GSM 05.05 requires the base station transmitter to have 12 dB of static output **power control** for purposes of adjusting cell size. If downlink **power control** is supported, up to 30 dB of additional range is required. The switching transient specifications must be met over at. . .

SUMMARY:

BSUM(13)

As the transmitter power is controlled, the noise figure of the gain stage line-up degrades when **power control** occurs at elements closest to the low power gain stages (i.e., closest to the input signal to be amplified). As. . .

SUMMARY:

BSUM(14)

As . . . enough, several other design aspects must also be considered. The control element utilized (the element used for both